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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,577	10/27/2003	Beat Krattiger	02931-P0062A	3546

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EXAMINER

LEUBECKER, JOHN P

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,577

Applicant(s)

KRATTIGER ET AL.

Examiner

John P. Leubecker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 8 and 18-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 7 and 9-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/27/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

Election/Restrictions

1. Applicant's election of Species 1 for the first transmission system and Species 1 for the second transmission system in the reply filed on August 21, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Claims 2, 6, 7 and 17 are readable on the chosen species. Claims 1 and 9-16 are generic. Accordingly, claims 3-5, 8 and 18-27 are withdrawn.

Specification

2. The abstract of the disclosure is objected to because it contains multiple paragraphs. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 1-3 and 7 are objected to because of the following informalities: in claim 1, line 6, "in distal direction" should be --in a distal direction--; line 10, "in proximal direction" should be --in a proximal direction--; in claim 2, line 2, "an imaging optics" should be --imaging optics--; in claim 3, lines 3-4, "in proximal direction" should be --in a proximal direction--; in claim 7, line 2, "an imaging optics" should be --imaging optics--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 14, "said distancing" lacks antecedent basis.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 7, 9-12 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuyuki et al. (U.S. Pat. 5,547,457).

Referring mainly to Figure 2, Tsuyuki et al. disclose a shaft (M) having a distal end, an interchangeable head (AD) detachably connected to said distal end of said shaft at a coupling point (Fig.2); a first transmission system (LG) for transmission of illuminating power in a distal direction, said first transmission system being arranged partially in said shaft and partially in said interchangeable head and passing through said coupling point (Fig.2); a second transmission system (L1, LF, O, and IG) for transmission of image information in a proximal direction, said second transmission system being arranged partially in said shaft and partially in said interchangeable head and passing through said coupling point (Fig.2); at least one of said

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interchangeable head and said coupling point being designed in such a way that upon loosening of said interchangeable head image information of perceptively modified quality is transmitted by said second transmission system (any change in axial distance, such as upon loosening, will change the focus, which is a “perceptively modified quality”). As to claim 2, any optic element is “exchangeable” either by replacing the element itself or using a different shaft. As to claim 7, note that optics (LF) are arranged entirely in the head (AD). As to claims 9-12 and 14, wire (WM) anticipates an electrically conductive positioning pin and the lumen it extends through anticipates a bore. As to claims 15 and 16, the end of wire (WM) in the interchangeable head anticipates an “operating element” engageable to the end in the distal shaft at plug (E).

8. Claims 1, 2, 6, 7, 9-11 and 13-17 are rejected under 35 U.S.C. 102(a) as being anticipated by Miyazaki (U.S. Pat. 6,184,923).

Miyazaki discloses a shaft (24) having a distal end, an interchangeable head (30A, Fig.2) detachably connected to said distal end of said shaft at a coupling point (Fig.2); a first transmission system (33,45) for transmission of illuminating power in a distal direction, said first transmission system being arranged partially in said shaft and partially in said interchangeable head and passing through said coupling point (Fig.2); a second transmission system (31,43) for transmission of image information in a proximal direction, said second transmission system being arranged partially in said shaft and partially in said interchangeable head and passing through said coupling point (Fig.2); at least one of said interchangeable head and said coupling point being designed in such a way that upon loosening of said interchangeable head image information of perceptively modified quality is transmitted by said second transmission system

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(any change in axial distance, such as upon loosening, will change the focus, which is a “perceptively modified quality”). As to claim 2, note cover glass (not numbered) and imaging device in distal end of shaft which, by inherent nature of being a combination of component parts, are “exchangeable”. As to claim 6, the solid optical elements at the coupling point for the first transmission system are inherently flat and polished. As to claim 7, note that (33) is entirely within head (30A). As to claims 9-11 and 14, note positioning pin (35) and bore (47). As to claim 13, note elastic member (not numbered but shown as O-ring between near threads) which inherently provides distancing force (by nature of the tight fit and elasticity of the O-ring). As to claims 15 and 16, pin (35) and bore (47), as broadly as claimed anticipates an “operating element” and a “plug”.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuyuki et al. in view of Abramson (U.S. Pat. 4,425,375).

Tsuyuki et al. disclose the device as described above but fails to mention that ends (at the coupling point) of the optical fiber waveguides are “polished”. If not inherent due to conventional optical fiber bundle manufacturing techniques, Abramson is just one reference cited

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as showing that such "polishing" of the end provides for increased light efficiency (col.1, lines 18-33), especially when two such ends are being optically connected. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have provided a "polished" surface on the ends of the optical fiber waveguides of Tsuyuki et al.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hasegawa et al. (U.S. Pat. 6,361,491)

Tsuyuki (U.S. Pat. 6,206,825)

Chikama (U.S. Pat. 5,961,445)

Hasegawa (U.S. Pat. 4,941,457)

Miyazaki (U.S. Pat. 4,919,114)

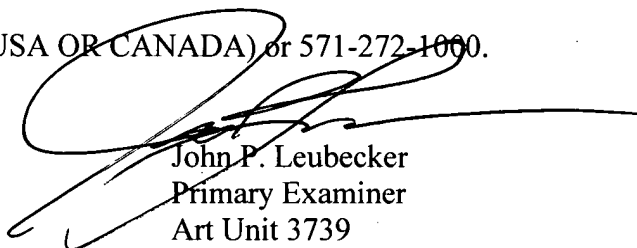
Tahjoh et al. (U.S. Pat. 4,856,495)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John P. Leubecker
Primary Examiner
Art Unit 3739

jpl